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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,802	09/25/2001	Nathaniel M. McCully	07844-468001/ P432	9166

21876 7590 09/10/2004

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EXAMINER	
BLACKWELL, JAMES H	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/963,802	MCCULLY ET AL.	
	Examiner	Art Unit	
	James H Blackwell	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/02/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leszczynski (U.S. Patent No. 4,833,627).

In regard to independent Claim 1 (and similarly independent Claim 15), Leszczynski teaches that data for spacing between characters are stored on Kerning Tables in memory portion B (Col. 4, lines 42-45; compare with Claim 1 (and similarly Claim 15), ***"... at least one inter-character-class spacing amount setting table, for use in line composition, for grouping similar characters, forming a plurality of character classes setting inter-character spacing amounts between a character class of a previous character and a character class of a next character within a pair of continuous characters"***). Leszczynski also teaches a CRT display (12). Additionally, a printer and/or phototypesetter are also included and provide a finished output. Leszczynski also teaches a keyboard (11) (Col. 4, lines 26-29; Fig. 1; compare with Claim 1 (and similarly Claim 15), ***"... a display device for displaying electronic text that has been line composed and an input device for providing user input"***). Leszczynski also teaches a computerized system for continuous and automatic correction of the contours of certain character combination pairs appearing within a text

to be typeset. It is a particular object to make such corrections based upon selected tables of combination pairs stored in memory and to provide various functions for selectively making the corrections in a continuous mode of operation (Col. 2, lines 11-19; compare with Claim 1 (and similarly Claim 15), ***"... wherein the text composition spacing amount setting device has a basic settings mode for setting the inter-character spacing amount using a character class relationship table defining a relationship between the character class for the previous character and the character class for the next character"***). Though not specifically a "basic settings mode", it would have been obvious to one of ordinary skill in the art at the time of invention to consider Leszczynski's teaching as a basic mode of operation because it handles most common situations, providing the benefit of dealing with expected and ordinary typesetting problems. Leszczynski continues to teach that in the design mode of correction, shown in Fig. 5(a), the designed contour representation of a whole character stored in Table J can be substituted for a character in an assembled line. For a designed character element or elements, the normalized contour from Table C is used and the contour of the designed element is substituted in place of the normal element, as indicated in Fig. 5(b) (Col. 9, lines 66-67; Col. 10, lines 1-5; compare with Claim 1 (and similarly Claim 15), ***"... detailed settings mode for setting the inter-character spacing amount directly without using the character class relationship table"***). Again, Leszczynski does not specifically teach a "detailed settings mode". However, it would have been obvious to one of ordinary skill in the art at the time of invention to have realized that Leszczynski's design mode allows one to fine tune standard settings,

providing the benefit of being able to correct less commonly encountered typesetting problems.

Claims 2-5, 7-12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leszczynski in view of Nakayama et al. (hereinafter Nakayama, U.S. Patent No. 5,802,532).

In regard to dependent Claim 2, Leszczynski fails to specifically teach various types of character classes as claimed. However, Nakayama teaches that a table is prepared in advance which includes characters classified according to position (center, right spaced or left spaced), and space widths (front space and rear space) recorded for respective character positions. When the second character M7 is not included in this table, correction amounts .DELTA.U6 and .DELTA.U7 are determined by the equal distribution mode in the first embodiment (Col. 15, lines 4-10; Fig. 14). Note that Fig. 14 contains centered punctuation, and other punctuation and scenarios. Compare with Claim 2 (and similarly Claim 9), ***"... the plurality of character classes includes one or more of (1) starting parenthesis, (2) ending parenthesis, (3) characters that cannot appear at the start of a line, (4) non-centered punctuation, (5) centered punctuation, (6) period, (7) comma, (8) repeating characters that cannot be broken across lines, (9) preceding abbreviation code, (10) following abbreviation code, (11) full-width ideographic spaces, (12) hiragana, (13) Japanese characters other than character classes (1) through (12), (14) full-width numeral, (15) half-width numeral, (16) half-width Roman text, (17) start of line, (18) start of***

paragraph, and (19) end of line"). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Nakayama because both deal with electronic typesetting and lookup tables that help in determining proper layout and spacing of characters in a line. The teaching of Nakayama provides the benefit of specifying detailed instructions on how to deal with character combinations.

In regard to dependent Claim 3 (and similarly dependent Claim 10), Leszczynski fails to specifically teach that *the character class relationship table associates the same spacing amount between the previous character and the next character in two adjacent character sets, each character set including a previous character and a next character.* However, Nakayama teaches a first and second space reduction amounts may be derived from a table, as shown in Fig. 16, of space reduction amounts recorded in advance for respective character pairs (Col. 16, lines 34-39). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Nakayama because both deal with electronic typesetting and lookup tables that help in determining proper layout and spacing of characters in a line. The teaching of Nakayama provides the benefit of specifying detailed instructions on how to deal with character combinations.

In regard to dependent Claim 4 (and similarly dependent Claim 11), Leszczynski fails to specifically teach that *the character class relationship table provides the same spacing amount if the character class for either the previous character or the next character is non-punctuation (that is, any of character classes (3), (4), (8), (9), (10),*

(12), (13), (14), (15), or (16)) or if the character class for either the previous character or the next character is (5) centered punctuation. However, Nakayama teaches (Fig. 14) a situation where the character position is centered, the character(s) are punctuation, and the spacing width for the front space is equal to the rear space. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Nakayama because both deal with electronic typesetting and lookup tables that help in determining proper layout and spacing of characters in a line. The teaching of Nakayama provides the benefit of specifying detailed instructions on how to deal with character combinations such as centered punctuation.

In regard to dependent Claim 5 (and similarly dependent Claim 12), Leszczynski fails to specifically teach that *the spacing amount can be set by a user input in the basic settings mode if the character class for the previous character and the character class for the next character have any of the following relationships: 1) Non-punctuation -> Starting parenthesis, 2) Ending parenthesis -> Non-punctuation, 3) Ending parenthesis -> Starting parenthesis, 4) Period -> Starting parenthesis, 5) Period -> Non-punctuation, 6) Comma -> Starting parenthesis, 7) Comma -> Non-punctuation, 8) Centered punctuation -> <- Centered punctuation, 9) Half-width Roman text -> <- Non-punctuation, 10) Start of paragraph -> Starting parenthesis, 11) Start of paragraph -> Non-punctuation,12) Start of line -> Starting parenthesis,13) Ending parenthesis -> End of line, 14) Period -> End of line, 15) Comma -> End of line, 16) Centered punctuation -> End of line.* However, Nakayama teaches a table is prepared in advance which includes characters classified according to position (center, right spaced or left spaced),

and space widths (front space and rear space) recorded for respective character positions. When the second character M7 is not included in this table, correction amounts .DELTA.U6 and .DELTA.U7 are determined by the equal distribution mode in the first embodiment (Col. 15, lines 4-10; Fig. 14). Note that Fig. 14 contains centered punctuation, and other punctuation and scenarios. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Nakayama because both deal with electronic typesetting and lookup tables that help in determining proper layout and spacing of characters in a line. The teaching of Nakayama provides the benefit of specifying detailed instructions on how to deal with character combinations such as centered punctuation.

In regard to dependent Claim 7 (and similarly dependent Claim 14), Leszczynski fails to specifically teach that *a spacing amount setting file is provided in which a file name can be attached to an inter-character-class spacing amount setting table having spacing amounts set by a user and saved.* However, Nakayama teaches that a character string input (2) receives character string data from a medium storing character string data files (font names, character sizes, character codes, etc.) created on a word processor or the like. The character string data received is stored in character string information storage (3) under control of the controller (1). The character string data stored in the character string information storage is used as reference by the controller (1). A facing space designating unit (4) is used by the operator to input a space between adjacent characters (designated facing space r.sub.0), and this facing space is stored in designated facing space storage (5). The designated facing space r.sub.0 stored in the

designated facing space storage (5) is used as reference by the controller (1) (Col. 7, lines 9-22). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Nakayama because both deal with electronic typesetting and lookup tables that help in determining proper layout and spacing of characters in a line. The teaching of Nakayama provides the benefit of specifying file names for the various setting tables. Nakayama also teaches that these files are created on a word processor or the like, indicating that they can be changed using the same programs. Nakayama does not teach setting modes. However, Leszczynski teaches a computerized system for continuous and automatic correction of the contours of certain character combination pairs appearing within a text to be typeset. It is a particular object to make such corrections based upon selected tables of combination pairs stored in memory and to provide various functions for selectively making the corrections in a continuous mode of operation (Col. 2, lines 11-19) (basic settings mode, see argument in Claims 1, and 15 above). Leszczynski also teaches that in the design mode of correction, shown in Fig. 5(a), the designed contour representation of a whole character stored in Table J can be substituted for a character in an assembled line. For a designed character element or elements, the normalized contour from Table C is used and the contour of the designed element is substituted in place of the normal element, as indicated in Fig. 5(b) (Col. 9, lines 66-67; Col. 10, lines 1-5) (detailed settings mode, see argument in Claims 1, and 15 above). Compare with Claim 7 (and similarly Claim 14), ***"... the inter-character-class spacing amount setting table saved in the file being accessible and modifiable by a user in either***

the basic settings mode or in the detailed settings mode"). Leszczynski specifically teaches that in the design mode (detailed settings mode) different representations of a given character or parts of a given character are designed and stored, and then recalled for automatically changing input characters (Col. 2, lines 61-64). This suggests that one could perform modifications in this case. However, it would have been obvious to one of ordinary skill in the art at the time of invention to assume that if the tables are modifiable in one mode of operation, that they would have been modifiable in a more automatic mode as well. The benefit would have been to provide for a more efficient execution of the typesetting program by avoiding multiple runs due to common, but unexpected character combinations.

In regard to independent Claim 8 (and similarly independent Claim 16), Leszczynski fails to teach *display on a display device a spacing amount saved in an inter-class character table in response to a user selection in the inter-character class spacing amount setting table*. However, Nakayama teaches a display/output means for displaying an adjusted character string based on said character string data stored in said character string data storage means, and corrected space reduction amounts for said characters (Col. 19, lines 53-54; Col. 20, lines 1-2). Leszczynski continues to teach a computerized system for continuous and automatic correction of the contours of certain character combination pairs appearing within a text to be typeset. It is a particular object to make such corrections based upon selected tables of combination pairs stored in memory and to provide various functions for selectively making the corrections in a continuous mode of operation (Col. 2, lines 11-19). Though not

specifically a "basic settings mode", it would have been obvious to one of ordinary skill in the art at the time of invention to consider Leszczynski's teaching as a basic mode of operation because it handles most common situations, providing the benefit of dealing with expected and ordinary typesetting problems. Leszczynski fails to specifically teach displaying the amount saved on screen in a basic settings mode. However, it would have been obvious to one of ordinary skill in the art at the time of invention to display such a result, by simply displaying the values stored in memory to the screen, providing feedback to the typesetter. Leszczynski continues to teach that in the design mode of correction, shown in Fig. 5(a), the designed contour representation of a whole character stored in Table J can be substituted for a character in an assembled line. For a designed character element or elements, the normalized contour from Table C is used and the contour of the designed element is substituted in place of the normal element, as indicated in Fig. 5(b) (Col. 9, lines 66-67; Col. 10, lines 1-5). Again, Leszczynski does not specifically teach a "detailed settings mode". However, it would have been obvious to one of ordinary skill in the art at the time of invention to have realized that Leszczynski's design mode allows one to fine tune standard settings, providing the benefit of being able to correct less commonly encountered typesetting problems. Leszczynski fails to specifically teach displaying the amount saved on screen in a detailed settings mode. However, it would have been obvious to one of ordinary skill in the art at the time of invention to display such a result, by simply displaying the values stored in memory to the screen, providing feedback to the typesetter.

Claims 6, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leszczynski in view of Nakayama and in further view of Agrawal (U.S. Patent No. 6,081,816).

In regard to dependent Claim 6 (and similarly dependent Claim 13), Leszczynski fails to teach that *the user settable spacing amount for items 1) through 16) are displayed in a dialog box on the display device.* However, Agrawal teaches a user interface tool, such as a tool bar item or a pop-up window, may alternatively be provided to allow a user to set the span criteria on a case-by-case basis (Col. 9, lines 18-20). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski and Agrawal because both deal with text layout. Adding Agrawal provides the benefit of a graphical user interface device to set spacing. Agrawal also teaches setting the span criteria MINWIDTH, LEFTAWAY, and RIGHTAWAY. MINWIDTH sets a minimum width for a span, LEFTAWAY sets a minimum clearance between the span and the left edge of the constraint, and RIGHTAWAY sets a minimum clearance between the span and the right edge of the constraint (using the GUI described above) (Col. 8, lines 64-67; Col. 9, lines 1-4; compare with Claim 6 (and similarly Claim 13), ***"... wherein the text composition spacing amount setting device further is operable to receive a user input setting an optimum value, a minimum value, and a maximum value for the spacing amount for each item 1) through 16)"***). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Leszczynski,

Nakayama, and Agrawal because all three deal with text layout. Adding Agrawal provides the benefit of a graphical user interface device to set specific spacing amounts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H Blackwell whose telephone number is 703-305-0940 (mid-late October 2004, phone number will be 571-272-4089). The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 703-305-9792 (mid-late October 2004, phone number will be 571-272-4090). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Blackwell
09/02/04

SANJIV SHAH
PRIMARY EXAMINER